

# **Egyptian Herbal Monograph**

**Volume 3**

**Medicinal plants used in Egypt**

**Egyptian Drug Authority (EDA)**

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# Egyptian Herbal Monograph

## Medicinal Plants Used in Egypt

***Eucalyptus globulus* Labill.**

كافور

### 1. Names & Synonyms (1)

*Eucalyptus globulus* Labill.

**Family:** Myrtaceae.

**Syns.:** *Eucalyptus maidenii* subsp. *globulus* (Labill.) J.B.Kirkp.

**Arabic name:** Kafur كافور (2).

**English name:** Eucalyptus (3).

### 2. Parts used for medicinal purpose

Fresh /dried leaves (3, 4).

### 3. Major chemical constituents

- **Essential oils:** 1,8-Cineole (eucalyptol), *p*-cymene,  $\alpha$ -pinene and  $\alpha$ -limonene (5).
- **Others:** Chlorogenic and ellagic acids, quercetin, quercetin 3-glucuronide, luteolin and rutin (6).

### 4. Medicinal Uses (Indications)

- A. Relief of cough associated with cold (3, 7).
- B. Expectorant and for symptomatic treatment of mild inflammation of the respiratory tract, bronchitis, asthma, inflammation of the throat and fever (4).
- C. Symptomatic relief of localized and rheumatic muscle pain (4, 7).

### 5. Herbal preparations correlated to medicinal use

- 1) Comminuted herbal substance is added to hot water in the form of infusion (3, 4).
- 2) Tincture (1:5), extraction solvent: Ethanol 68-80% (3).
- 3) Essential oil (4, 7).

Herbal preparations (2 and 3) are in pharmaceutical dosage forms. The pharmaceutical form should be described by the pharmacopoeia full standard term.



## 6. Posology and method of administration correlated to medicinal use

### Preparation 1 (3, 4)

#### Indications A and B

##### Adolescents, adults and elderly

- **Oral use:** Single dose: 1.5 - 3 g in 150 ml of boiling water as a herbal tea, up to 4 times daily. Daily dose: 4.5 - 12 g.
- **Inhalation:** 3 g in boiling water, up to 3 times daily. Daily dose: 3 - 9 g.

### Preparation 2 (3, 8)

#### Indications A and B

##### Adults

**Oral:** Single dose: 2.5 g, up to 4 times daily. Daily dose: 2.5 - 10 g.

### Preparation 3

#### Indications A and B

##### Oral use (4):

##### Adolescents, adults and elderly

- Single dose: 100 - 200 mg, 2 - 5 times daily (7).
- 0.3 - 0.6 ml, daily.

##### Buccal use:

##### Adolescents, adults and elderly (4)

- 0.2 - 15.0 mg as lozenges, dissolved slowly in the mouth, every 30 - 60 minutes
- 20 ml of a 0.91 mg/ml solution as mouth wash, gargled twice daily.

##### Inhalation (7):

##### Adolescents, adults and elderly

Single dose: Up to 3 - 8 drops per 150 - 250 ml boiling water, 3 times daily (3).

##### Children between 4 and 12 years of age

Single dose: Up to 2 - 4 drops per 250 ml boiling water, 3 times daily.

##### Bath additive (7):

##### Adolescents, adults and elderly

Single dose: 1.5 - 6 g /100 liter water, 3 - 4 times a week.

**Children between 4 and 12 years of age:** Single dose: 0.5 - 3 g /100 liter water, 3 - 4 times a week.

Recommended bath temperature: 35 - 38°C for 10 - 20 minutes.



### Indications A and C

#### Cutaneous use

##### Adults and elderly (4)

- Several drops or 30 ml essential oil in 500 ml warm water, rubbed into the skin for local application.
- 5 - 10% in hydroalcoholic preparations (8).
- Liquid dosage forms (5 - 20%): A few drops on chest or back, 2 - 3 times, daily (7).
- Semi-solid dosage forms (5-20% Eucalyptus oil): Apply a thin layer on chest and back, 2 - 3 times daily (7, 8).

##### Children between 4 and 12 years of age and adolescents (7)

- Liquid dosage forms: A few drops on chest or back, 2 - 3 times daily.
- Semi-solid dosage forms (10% Eucalyptus oil): Apply a thin layer on chest and back, 2 - 3 times daily.

#### Bath additive (7)

##### Children between 4 and 12 years of age, adolescents, adults and elderly:

Single dose: 1.7- 4 g essential oil /100 liter water, 3 - 4 times a week.

Recommended bath temperature: 35 - 38°C for 10-20 minutes.

#### Duration of use (4, 7)

**Indications A and B:** If the symptoms persist longer than one week during the use of the medicinal product, a doctor or a pharmacist should be consulted.

#### Indication C:

- **As bath additive:** If the symptoms persist longer than one week during the use of the medicinal product, a doctor or a pharmacist should be consulted.
- **Cutaneous use:** If the symptoms persist longer than two weeks during the use of the medicinal product, a doctor or a pharmacist should be consulted.

#### Method of administration (4, 7):

**Indication A:** Oral, buccal, cutaneous, inhalation and as bath additive.

**Indication B:** Oral, buccal, cutaneous and as bath additive.

**Indication C:** Cutaneous and as bath additive.

## 7. Contraindications

- Hypersensitivity to active substances and to other plants of the same family.
- Children under 30 months of age, because there is a risk that cineole containing preparations, like other essential oils, can induce laryngospasm (7).
- Patients with inflammation of the gastrointestinal tract, gall bladder disease or impaired liver function (4).



- Infants and small children should not have preparations containing the oil applied to their faces as this practice can lead to glottal or bronchial spasms, asthma-like attacks or even death by asphyxiation (8).
- Children with history of seizures (febrile or not) (7).
- Full hot baths are contraindicated in cases of large skin injuries and open wounds, acute skin diseases, high fever, severe infections, severe circulatory disturbances and cardiac failure (7).

## 8. Special warnings and precautions for use

- **For indication A:** When dyspnoea, fever or purulent sputum occurs, a doctor or a pharmacist should be consulted (3, 7).
- **For preparation 1:** The use in children under 12 years of age has not been established (3).
- **For preparation 2:** The use in children and adolescents under 18 years of age has not been established (3).
- **For preparation 3 (7):**
  - o The use in children between 2.5 and 4 years of age has not been established.
  - o Cutaneous use: Eye contact with unwashed hands after the application of eucalyptus oil may potentially cause irritation. Eucalyptus oil should not be applied on broken or irritated skin.
  - o Oral use: Eucalyptus oil should be used with caution in inflamed and ulcerated conditions of the gastrointestinal tract.
  - o **For indication A:** The oral use in children under 12 years of age has not been established.
  - o When reddening or swelling of the aching parts occur a doctor or a pharmacist should be consulted.

## 9. Interactions with other medicinal products and other forms of interaction (3, 7)

- None reported.

## 10. Fertility, pregnancy and lactation (3, 7)

- Safety during pregnancy and lactation has not been established. In the absence of sufficient data, the use during pregnancy and lactation is not recommended.
- No fertility data available.

## 11. Effects on ability to drive and use machines (3, 7)

- No studies on the effect on the ability to drive and use machines have been performed.

## 12. Undesirable effects (3, 7)

- None known.
- If adverse reactions occur, a doctor or a pharmacist should be consulted.



### 13. Overdose

- **For preparations 1 and 2:** No case of overdose has been reported (3).
- **For preparation 3 (7):**
  - Cutaneous use: Accidental overdose may cause skin irritation.
  - Inhalation: No case of overdose has been reported.
  - Buccal use: Accidental overdose may cause gastrointestinal symptoms, vomiting, diarrhoea, nausea, loss of consciousness, apnoea, respiratory problems, tachypnea, ataxia and other CNS problems, dilated or constricted pupils.

### 14. Relevant biological activities

- Not required as per Egyptian guidelines for registration of herbal medicines.

### 15. Additional data

### 16. Date of last compilation/last revision

25/12/2023

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